MERCURY BY COLD VAPOR ATOMIC FLUORESCENCE SPECTROMETRY
EPA 1631 REVISION E 2002

Facility Name:_____VELAP ID_____

Assessor Name:_____Analyst Name:_____Inspection Date_____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____ Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____					
When dissolved mercury was determined, were samples filtered through a 0.45 µm filter prior to preservation?	2.2 3.2				
Was a filtration blank analyzed if samples were filtered?	8.4				
Were samples collected in fluoropolymer or glass bottles with fluoropolymer or fluoropolymer-lined caps?	6.1.1				
Were new bottles heated to 65-75°C in acid prior to first use?	6.1.2.1				
Were samples preserved with either HCl or BrCl analyzed within 90 days?	8.5.1				
Were unpreserved and unoxidized samples analyzed within 48 hours?	8.5.1				
Were unpreserved and oxidized samples analyzed within 28 days?	8.5.1				
Were at least three method blanks analyzed with every analytical batch determined to be free from contamination (less than or equal to 0.5 ng/L)?	9.1.7 9.4.4				
Were reagent blanks analyzed with every analytical run to be free from contamination (less than or equal to 0.2 ng/L)?	9.4.3				
Were at least three System Blanks (≤0.5 ng/L) or three "Bubbler" Blanks (≤ 0.25 ng/L) analyzed with every analytical batch? (Blanks that demonstrate no contamination of the instrument system. These two blanks are different and have different criteria but only one type need be included in a batch.)	9.1.7 9.4.2				
Were field blanks shipped with every batch of samples at a rate of 1 for every 10 samples and analyzed to be free from contamination with every batch?	9.4.5.1				
Were sampling equipment blanks analyzed and demonstrated to be free from interference before use at any given site?	9.4.6				
Notes/Comments:					

MERCURY BY COLD VAPOR ATOMIC FLUORESCENCE SPECTROMETRY EPA 1631 REVISION E 2002					
Relevant Aspect of Standards	**Method Reference**	**Y**	**N**	**N/A**	**Comments**
Were Bottle Blanks from each lot of bottles filled with reagent water, acidified to pH < 2, allowed to stand for 24 hours, and analyzed to be free from contamination?	9.4.7				
Were LFM and LFMD pairs analyzed with every batch at a rate of 10% of samples to be between 71 and 125% recovery?	9.1.3 9.3				
Was calibration done with a minimum of five non-zero calibration standards?	9.1.7				
Did the lowest calibration standard have a RSD ≤ 15% and a recovery of between 75 and 125%?	10.3.2.7				
For a calibration range outside of 0.5 to 100 ng/L: __The difference between successive calibration points must be no greater than a factor of 10 __The RSD for all points must be less than 15% __The calibration factor for any point over 100 ng/L must be within ±15% of the average calibration for all the points below 100 ng/L __The calibration factor for any point below 0.5 ng/L must be within 25% of the average calibration factor for all points __The ML must be less than one-third the regulatory limit	10.4				
Were MDLs determined when a new analyst started work or a significant change in hardware was made?	9.2.1				
Was a CCV analyzed to be within 77 to 123% recovery at the beginning and end of each sample batch?	9.5.1				

Notes/Comments: